**Sunrise Academy**

**Home Assignments**

**Class 10th**

**English**

**Mathematics**

**Physics**

**Chemistry**

**Biology**

**Economics**

**Commercial studies**

**Geography**

**History & Civics**

**Computer Applications**

**Physical Education**

**NOTE:**

* **All the work is to be done in previous class subject notebook. Whole work has to be faired out in project files after the lockdown gets over.**
* **Class 10 project files should be covered with light blue chart papers. All the files should be covered with cellophane sheets and the label should be printed and pasted.**

**English**

**Project work:**

Q.1 Revise and write down the act wise summary of the acts (1-5).

Q.2 Write the detailed summary of the following stories.

(a) A horse and two goats.

(b) Hearts and hands.

(c) An angel in disguise.

Q.3 Write the detailed summary of the following poems.

(a) After blenheim

(b) Television

(c) Daffodiles

Q.4 Give a list of 25 prepositions and 25 verbs and make sentences on them.

**Mathematics**

1. Make a project on the topic of matrices.

**Physics**

**Project work**

Make a project on any one of the following topics:

1. OHM'S LOW and Resistance.

2. Force on a current conductor in a magnetic field.

3. To study the Phenomenon of Electromagnetic induction.

4. To study Refraction of light.

5. Law of Refraction of sound.

6. The Total interval Reflection.

**Chemistry**

Describe acids bases and salts in detail. Give four examples of each. Define deliquescent and efflorescent salts. Write down two differences between them.

**Biology**

Make a project on any one of the following topics:

1. Endocrine system

2. Human heart

3. Sense organs -eye and ear

4. Nervous system

The project should be supported by coloured diagrams.

It should consist of at least 15 pages

The project should have the following subheadings:

1. Acknowledgement
2. Introduction
3. Main content
4. Conclusion

**Economics**

1. Study how consumer protection act, 1986 plays a key role for consumers.

2. Study about the types of markets and their functions.

**Commercial Studies**

1) What are the benefits of E-Commerce over the traditional method of transaction? How it plays a key role in business?

2) Study about the banking structure of India in relation to commercial banks and central bank.

**Geography**

**Project work:**

Write and explain 'Climate of India' with necessary figures, diagrams and maps covering all aspects and factors.

To be done in Project File.

**History & Civics**

Choose one topic from given topics for project :

1. Mahatma Gandhi and freedom struggle
2. United Nations and it's various agencies
3. Union parliament

**Computer Applications**

**Project work:**

1. Write a program to check the number whether it is composite number or not. (**Composite Number**. more ... A whole **number** that can be divided exactly by **numbers** other than 1 or itself. Example: 9 can be divided exactly by 3 (as well as 1 and 9), so 9 is a **composite number**. But 7 cannot be divided exactly (except by 1 and 7), so is NOT a **composite number** (it is a prime **number**)).
2. Print the sum of the following series

1 + 12 + 123 + 1234 + … (123…n)

1. Write a program to input an integer number from the user and print the sum of the digits. Example – 123= 1+2+3 , sum=6
2. Write a menu driven program to accept a number and check and display whether it is prime number or not, or automorphic number or not. (Use switch – case statement)
   1. Prime number –A number is said to be a prime number if it is divisible only by q and itself and not by any other number. Example - 3, 5, 7, 11, 13 etc.
   2. Automorphic number – An automorphic number is the number which is contained in the last digit(s) of its square. Example – 25 is an automorphic number as its square is 625 and 25 is present as the last two digits.
3. Write a menu driven program to accept a number from the user and check whether it is Palindrome or a Perfect number.
   1. Palindrome number – A number is a Palindrome which when read in reverse order is same as read in the right order. Example – 11, 101, 151 etc.
   2. Perfect number – A number is called Perfect if it is equal to the sum of its factors other than the number itself. Example – 6=1+2+3
4. Using a switch statement, write a menu driven program to convert a given temperature from Fahrenheit to Celsius and vice versa. For an incorrect choice, an appropriate error message should be displayed.

**(Hint :** C = (5/9) \* (F-32) and F= 1.8\*(C+32)

1. Write a menu driven program to calculate the area of square, rectangle, triangle and circle.
2. A school has following rules for grading system:  
   a. Below 25 - F  
   b. 25 to 45 - E  
   c. 45 to 50 - D  
   d. 50 to 60 - C  
   e. 60 to 80 - B  
   f. Above 80 - A  
   Ask user to enter marks and print the corresponding grade.
3. [Write a program to input basic salary of an employee and calculate its Gross salary according to following:](https://codeforwin.org/2015/05/c-program-to-calculate-gross-salary-of-employee.html)  
   Basic Salary <= 10000 : HRA = 20%, DA = 80%  
   Basic Salary <= 20000 : HRA = 25%, DA = 90%  
   Basic Salary > 20000 : HRA = 30%, DA = 95%
4. Write a program in Java to find the Least Common Multiple (L.C.M.) of two numbers entered by the user.

**Physical Education**

Write any two of the following games in project file.

1. Cricket
2. Football
3. Handball
4. Hockey
5. Basketball
6. Volleyball
7. Softball

The details for each game are given below -

1. Knowledge of the game
2. Rules of the game
3. Fundamental Skills and Technique
4. Terminology
5. National and International Governing Bodies
6. National and International Tournaments